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> fragment of a target nucleic acid and is substantially complementary to said second targeting polynucleotide; and

- iii) a separation moiety;
- b) contacting said EHR compositions with [one or more] a library of target nucleic acids [sample(s)] under conditions wherein said targeting polynucleotides hybridize to one or more target nucleic acids [member(s)] of [one or more nucleic acid sample(s)] said library; and
- isolating and cloning said target nucleic acid(s) wherein said [providing]
  isolating and [contacting] cloning are [done] performed using a robotic system.
- 16. (Amended) The method according to claim [1]12, wherein said target nucleic acid comprises single-polynucleotide polymorphisms.
- 17. (Amended) The method [of] according to claim [1]12, wherein said library of target nucleic acids comprises all or part of a cDNA library, genomic DNA library, genomic DNA samples, or combinations thereof.
- 18. (Amended) The method of claim 17, wherein said genomic DNA <u>samples are</u> [library is] from [a single] <u>one or more organisms</u>.
- 20. (Amended) The method according to claim 19 wherein at least one of said making, introducing and performing steps [are] is [done] performed using a robotic system.
- 22. (Amended) The method according to claim 21 wherein at least one of said making, adding, and determining steps [are] [done] performed using a robotic system.
- 28. (Amended) The method according to claim [26 or 27] 12 further comprising[:]

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sequencing said [expressed] target nucleic acid.

33. (Amended) The method of claim [1, 13, 21, 23, 25, 26, 27, 28, 31 or 32]12, wherein said robotic system comprises a computer workstation comprising a microprocessor programmed to manipulate a device selected from the group consisting of a thermocycler, a multichannel pipettor, a sample handler, a plate handler, a gel loading system, a gene sequencer, an automated transformation system, a colony picker, a bead picker, a cell sorter, an incubator, a light microscope, a fluorescence microscope, a spectrofluorimeter, a spectrophotometer, a luminometer, a CCD camera and combinations thereof.